

Applicants' Guide to Award Negotiations with ARPA-E

Revised March 2016



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1 Overview

Congratulations on being selected for award negotiations! This guide will help you navigate the award negotiation process, from the critical first few days after selection until the signing of the award.¹

Upon selection, the Advanced Research Projects Agency — Energy (ARPA-E) will set an aggressive deadline for the completion of award negotiations, typically 60-90 days after selection. It is essential for you to identify the persons within your organization who will be participating in the award negotiations, and mobilize your resources to meet this important deadline. Having the key resources and people on hand will help you complete the award negotiation process in a timely manner.

Throughout the award negotiations and the performance of the project, it is important that you (1) respond to ARPA-E personnel in a prompt manner, (2) fill out documentation completely and accurately, and (3) ensure that you mark confidential information and documents as described in Appendix 1. In addition, you should not submit Protected Personally Identifiable Information (Protected PII) to ARPA-E. See Appendix 1 for guidance on confidential information and protected PII.

1.1 Schedule

Below is an approximation of the award negotiation process for both standard awards and awards involving a refinement of the draft Technical Milestones and Deliverables based on an 80-90 day schedule. Specific dates for actual deadlines will be provided to you in a separate document at the start of negotiations.

NEGOTIATION MILESTONE	Expected Completion
ARPA-E notifies Applicant of its selection for award negotiations and requests the Applicant to review the ARPA-E Model Cooperative Agreement and forms at http://arpa-e.energy.gov/arpa-e-site-page/award-guidance (non-SBIR/STTR awards) or http://arpa-e.energy.gov/?q=arpa-e-site-page/award-guidance-sbir-sttr (SBIR/STTR awards).	Day 1

¹ Every attempt has been made to make this guide as generally applicable as possible to all awards being negotiated under ARPA-E's Funding Opportunity Announcements (FOAs), including FOAs issued under ARPA-E's Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. However, there are often FOA-specific matters that may necessitate a different approach than what is described in this generally applicable negotiations guide. To the extent that there is an inconsistency between this guide and the requirements of a specific FOA, the FOA takes precedence. To the extent the specific FOA and/or this guide are inconsistent with Federal law or regulation, then Federal law or regulation takes precedence.

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ARPA-E sends a recorded webinar for Selectees (i.e., Applicants selected for award negotiations) to review the contracting process.	Day 3
Deadline for submitting questions about Attachment 1 to ARPA-E Legal Team.	Day 21
Deadline for submitting questions about Attachment 2 to DOE Patent Counsel.	Day 21
Deadline for providing DOE Patent Counsel with final list of unlimited data rights.	Day 32
Selectee drafts Technology-to-Market Plan and appropriate milestones.	Days 35
Selectee submits the Environmental Impact Questionnaire	Day 40
Deadline for finalizing the Technical Milestones and Deliverables with ARPA-E Program Director.	Day 41
Deadline for finalizing budget for the project with the Contracting Team.	Day 70
Deadline for Technology-to-Market Plan draft with assistance of ARPA-E Commercialization Advisor/Program Director	Day 73
Deadline for selectee to return final, signed SF-424 (to be completed once budget is finalized	Day 73
ARPA-E sends final award package to Selectee.	Day 82
Deadline for Selectee to return signed award package to ARPA-E.	Day 85
Selectees acknowledge receipt of award in FedConnect.	Day 90

Some award negotiations may require a refinement of the draft Technical Milestones and Deliverables that were submitted with a Selectee's Full Application. You will be notified by ARPA-E if your draft Technical Milestones and Deliverables will need to be refined. An adjusted schedule will apply for these negotiations:

1.2 Expectations for Negotiations

ARPA-E appreciates the time, effort, and energy you invested in preparing your Full Application. During the award negotiations, you should expect to make a number of updates, clarifications and changes to the documentation submitted as part of your Full Application. For example, it is not uncommon for ARPA-E to have selected only a portion of the work you proposed in your Full Application. Pursuant to ARPA-E's substantial involvement in the direction or re-direction of projects funded under Cooperative Agreements, the ARPA-E Program Director may request changes to your team (e.g. adding new team members or dropping others). In addition, the ARPA-E Program Director will push for aggressive Technical Milestones and Deliverables and



these will be negotiated into the terms and conditions of your award. In addition, the Contracting Team will require updates, clarifications and/or corrections to your budget and supporting documentation for all proposed expenditures. The Contracting Officer may impose conditions on your award, and require you to complete certain actions within short timeframes. There may be a number of matters that were not capable of resolution by ARPA-E unilaterally during the merit review and selection process that will need to be negotiated and resolved prior to the successful completion of negotiations and any award being made. The DOE Patent Counsel will negotiate strict limitations on technical data and information that is withheld from the public.

You are free to propose changes to the project during the award negotiation process, but it is essential that you keep the ARPA-E Program Director and Contracting Team apprised of any proposed changes. All changes must be approved by the Contracting Officer before final award.

2 Personnel

2.1 Personnel – Your Team

It is essential for you to identify the persons within your organization who will be responsible for negotiating and finalizing each aspect of the award.

- Contracting/Budget Personnel You will need contracting/budget personnel to review the ARPA-E Model Cooperative Agreement, respond quickly to ARPA-E Budget Review Questionnaires, and finalize the budget for the project.
- Legal Personnel You may need a general attorney to resolve any legal issues or to assist with the negotiation of general law issues. You may also need a patent attorney to identify and resolve any intellectual property issues.
- Technical Personnel You will need technical personnel, including the Principal Investigator, to negotiate aggressive Technical Milestones and Deliverables for the project.
- Environmental Health & Safety Personnel If your organization employs dedicated Environmental Health & Safety personnel, they will need to assist you in completing mandatory due diligence under the National Environmental Policy Act (NEPA).

2.2 Personnel – ARPA-E's Team



Upon selection, ARPA-E will assign a team of technical, contracting, and legal personnel to negotiate your award. It is critical to the negotiations process for you to respond to requests from ARPA-E personnel as promptly as possible.

2.2.1 ARPA-E Program Director

The ARPA-E Program Director coordinates and manages the award negotiation. He/she works with the Selectee to negotiate aggressive Technical Milestones and Deliverables.

The ARPA-E Program Director is assisted by support (contractor) personnel, commonly referred to as Science and Engineering Technical Assistants (SETAs).

2.2.2 Contracting Team

The Contracting Officer is responsible for reviewing and approving the award terms and conditions. When appropriate, he or she may approve or require the inclusion of special terms and conditions in the award. The Contracting Officer is the only person who has authority to bind the federal government and execute and modify the award.

The Contracting Team is responsible for reviewing the proposed budget for the project. During the budget review, the Contracting Team verifies cost data, evaluates specific parts of the budget, and ensures that proposed costs are consistently treated in accordance with applicable cost principles. The Contracting Team also reviews the allowability, allocability, and reasonableness of proposed expenditures and supports the Contracting Officer in his or her cost determinations. The Contracting Team may send to you questions or requests for clarification in the form of Budget Review Questionnaires. In addition, the Contracting Team may seek technical and cost review and input from the ARPA-E Program Director.

The Contracting Team will review your financial management system to determine if it is in compliance with Federal requirements and make a responsibility determination.

The Contracting Team consists of Contracting Officers and Contract Specialists.

NAME	TITLE	TELEPHONE	EMAIL
Mary	Contracting	202-287-1057	Mary.Barnes@hq.doe.gov, ARPA-E-
Barnes	Officer		CO@hq.doe.gov
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Clopton	Specialist		CO@hq.doe.gov
Lisa	Contract	202-2877-5553	Lisa.Persson@hq.doe.gov, ARPA-E-
Persson	Specialist		CO@hq.doe.gov



Renee	Contract	202-287-6341	Renee.Sperling@hq.doe.gov, ARPA-E-
Sperling	Specialist		CO@hq.doe.gov

2.2.3 ARPA-E Legal Team

The ARPA-E Legal Team is responsible for resolving legal issues relating to proposed awards, including conflicts of interest issues and NEPA matters. The ARPA-E Legal Team works with the Contracting Team to modify and finalize awards, as appropriate. In addition, the ARPA-E Legal Team works with Selectees to resolve a wide range of legal and contracting issues.

The ARPA-E Legal Team consists of the ARPA-E Chief Counsel, Deputy Chief Counsel, and supporting Attorney-Advisors.

NAME	TITLE	TELEPHONE	EMAIL
William Bierbower	Chief Counsel	202-287-6585	William.Bierbower@hq.doe.gov
Kathryn Aleda	Deputy Chief Counsel	202-287-5431	Kathryn.Aleda@hq.doe.gov
Geoffrey Goode	Attorney-Advisor	202-287-5520	Geoffrey.Goode@hq.doe.gov
Nichole Clagett	Attorney-Advisor	202-287-6409	Nichole.Clagett@hq.doe.gov

2.2.4 DOE Patent Counsel

DOE Patent Counsel are responsible for resolving intellectual property issues relating to proposed awards. DOE Patent Counsel work with Selectees to define the scope of unlimited data rights and to resolve issues relating to Government patent rights (e.g., march-in rights, government purpose license).

The DOE Patent Team consists of the DOE Assistant General Counsel for Technology Transfer and Intellectual Property and his team of Patent Counsel.

NAME	TITLE	TELEPHONE	EMAIL
Paul Gottlieb	ARPA-E Senior Advisor for Intellectual Property	202-287-6840	Paul.Gottlieb@hq.doe.gov
John Lucas	DOE Asst. General Counsel for Tech. Trans. and Intellectual Property	202-586-2939	John.T.Lucas@hq.doe.gov

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Linda Field	DOE Patent Counsel	202-586-3440	Linda.Field@hq.doe.gov

2.2.5 ARPA-E Technology-to-Market Team

The ARPA-E Technology-to-Market Team works with Selectees and the ARPA-E Program Director to ensure that Technology-to-Market requirements are appropriately integrated into the Technical Milestones and Deliverables. The ARPA-E Technology-to-Market Team is your principal point of contact for questions and issues relating to Technology-to-Market Plan requirements and ARPA-E commercialization assistance.

The ARPA-E Technology-to-Market Team consists of the ARPA-E Deputy Director for Commercialization and his team.

NAME	TITLE	TELEPHONE	EMAIL
David Henshall	Deputy Director for Commercialization	202-287-5511	David. Henshall@hq.doe.gov
Sue Babinec	Senior Commercialization Advisor	202-287-5493	Susan Babinec@hq.doe.gov
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3 ARPA-E Model Cooperative Agreement

3.1 Overview

ARPA-E has established a Model Cooperative Agreement. Use of a standardized agreement expedites the award negotiation process and reduces the administrative burden associated with ARPA-E's active project management.

The Model Cooperative Agreement explains the Prime Recipient's duties and responsibilities concisely and in plain English, which facilitates their compliance with reporting and other obligations. The Model Cooperative Agreement consists of the following attachments, which are available on ARPA-E's website at http://arpa-e.energy.gov/arpa-e-site-page/award-guidance (non-SBIR/STTR awards) and



http://arpa-e.energy.gov/?q=arpa-e-site-page/award-guidance-sbir-sttr (SBIR/STTR awards).

AWARD DOCUMENT	BRIEF DESCRIPTION
Cover Page	Assistance Agreement Form
Attachment 1	Special Terms and Conditions
Attachment 2	Intellectual Property Provisions
Attachment 3	Technical Milestones and Deliverables
Attachment 4	Reporting Checklist and Instructions
Attachment 5	Budget
Attachment 6	National Policy Assurances

For questions about Attachment 1 and Attachment 2, please contact the appropriate legal counsel referenced above by the deadline specified in the award negotiations schedule applicable to your award.

3.2 Cover Page (Assistance Agreement Form)

The Assistance Agreement Form includes key information regarding the project, including the award number, the name of the Prime Recipient (e.g., ABC Company, XYZ University), the name of the principal investigator, the period of performance, the total project cost, and the Prime Recipient's cost share.

An authorized representative of the Prime Recipient is required to sign Blocks 22 to 24 of the Assistance Agreement Form. By signing, the Prime Recipient agrees to the terms and conditions in Attachments 1, 2, 3, 4, 5, and 6 of the award, and affirms that it has fully disclosed other prior, current, and pending sources of funding for the project described in the award.

After the Contracting Officer uploads the final award documentation into FedConnect, you are required to view and acknowledge receipt of the award in FedConnect. Instructions for acknowledging awards are provided in Section 7 below.

3.3 Attachment 1 (Special Terms and Conditions)



ARPA-E has established a standard set of terms and conditions for cooperative agreements. Most of the principal terms and conditions are found in Attachment 1.

If you have questions concerning Attachment 1, please contact the ARPA-E Legal Team. Contact information for the ARPA-E Legal Team is provided in Section 2.2.3 above.

3.4 Attachment 2 (Intellectual Property Provisions)

ARPA-E, working with DOE Patent Counsel, has established a standard set of intellectual property provisions, but it has tailored these provisions for different types of Prime Recipients² and Subrecipients. As a result, you will find four versions of Attachment 2: one for small businesses, two for large businesses³, and one for universities and nonprofits.

In general, you may take title to intellectual property (IP) developed under the award upon compliance with procedures specified in the award, but the Federal Government retains certain rights in IP, including:

- Government Use License: The Federal Government may practice, or have it practiced on behalf of the Government, without paying royalties to the IP owner.
 See the Funding Opportunity Announcement (FOA) for more information.
- March-In Rights: If the IP owner fails to commercialize the IP developed under the award, the Federal Government may "march in" and require the IP owner to license the technology. See the FOA for more information.
- U.S. Manufacturing Requirements: Small businesses and their exclusive and nonexclusive licensees are required to substantially manufacture any products embodying (or produced through the use of) subject inventions in the United States for products being used or sold in the United States. Universities' and nonprofits' exclusive licensees are required to substantially manufacture any products embodying (or produced through the use of) subject inventions in the United States for products being used or sold in the United States. Large businesses and their exclusive and nonexclusive licensees are required to substantially manufacture any products embodying (or produced through the

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² Under SBIR/STTR awards, only the Attachment 2 for Small Business applies to Prime Recipients.

³ ARPA-E has created two versions of Attachment 2 for Large Businesses: (1) one version for Large Businesses that are subject to DOE's patent class waiver, and (2) one version for Large Businesses that are not subject to DOE's patent class waiver. Under DOE's patent class waiver, Large Businesses retain the right to elect title to subject inventions developed under their ARPA-E award. Large businesses who do not qualify for DOE's patent class waiver or another individual waiver may not elect title to subject inventions.



use of) subject inventions in the United States for products being used or sold anywhere in the world. See the FOA for more information.

ARPA-E recognizes that you will want to protect IP you develop under award, and you may have IP that was developed at private expense before you received this award. You will need to organize your IP into three categories:

- Limited Rights Data is proprietary data that was developed at private expense before you received this award. The Federal Government normally does not have any rights to this data, unless it deems it necessary for you to provide it to us for specified limited purposes. To protect Limited Rights Data, you should not disclose it to ARPA-E, unless it is necessary for us to evaluate your work under the award. When Limited Rights Data is delivered to ARPA-E, it must be marked with appropriate restrictive markings.
- Unlimited Rights Data is data produced under the award that is suitable for immediate public release. Data produced under government sponsorship is generally classified as public information.
- For Non-SBIR/STTR Awards: Protected Data is data produced under the award that is protected from public release for a limited period of time. You may designate data first produced under the conduct of this award as Protected Data; such data will be protected from public release for a period up to 5 years from the time it is first produced. However, certain data will be required to be delivered to ARPA-E with unlimited rights.
- For SBIR/STTR Awards: SBIR/STTR Data is data produced under the award that is
 protected from public release for a limited period of time. You may designate
 data first produced under the conduct of your ARPA-E award as SBIR/STTR Data;
 such data will be protected from public release for a period of 4 years after the
 Federal Government's acceptance of all deliverables under the project.
 However, certain data will be required to be delivered to ARPA-E with unlimited
 rights.

In the award, you will be required to identify the data that falls into the Unlimited Data Rights category. Upon approval by ARPA-E, other data produced under the award will be considered Protected Data or SBIR/STTR Data. The ARPA-E Program Director and DOE Patent Counsel will review your proposed list of Unlimited Data Rights and request modifications, as appropriate.

If you have questions concerning Attachment 2, please contact the DOE Assistant General Counsel for Technology Transfer and Intellectual Property, or the DOE Patent Counsel assigned to the ARPA-E team negotiating your agreement. Contact information is provided in Section 2.2.4 above.



3.5 Attachment 3 (Technical Milestones and Deliverables)

Attachment 3 is composed of three parts. Section A is the Statement of Project Objectives, a non-technical description of the project. Section B is an aggressive schedule of technical tasks, milestones, and deliverables that is negotiated by the Selectee and ARPA-E Program Director. Section C provides descriptions of the negotiated technical tasks, milestones, and deliverables in a table format.

Milestones and deliverables can be defined as follows:

- A <u>deliverable</u> is a tangible result or output that occurs in a project.
- A <u>milestone</u> is a point in time at the completion of a deliverable.

ARPA-E uses the Technical Milestones and Deliverables to measure your progress over the life of the project. There is a specific deadline for the completion of every technical milestone and deliverable. The first few quarters often focus on test results that determine whether the project should continue.

A typical schedule includes the following components:

- Project Management This section details what portions are allocated to general project management and resource planning, including preparations of all required interim reports and the final report.
- System Design This process details simulations of the specific subject that will be further developed with considerably more detail.
- Development and Modification This section should list the objects to develop the required level of capabilities and techniques.
- Supporting Information Any tasks or information that will support the matrix of information according to milestone timeline.
- Benefits Assessment This section details process models and specific information related to accessing the benefits as stated in Gantt chart.
- Technology-to-Market Plan Milestones Completion of the Technology-to-Market Plan and progress reports against that plan will be integrated as Technical Milestones and Deliverables. Additional Technology-to-Market milestones may be negotiated.

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⁴ For SBIR/STTR awards, the Selectee and Program Director negotiate technical milestones and deliverables for each Phase of the project.



Failure to achieve the Technical Milestones and Deliverables by the specified dates may result in renegotiation of the technical milestone and deliverable schedule, or termination of the award. At the ARPA-E Program Director's discretion, and with the Contracting Officer's final approval, a schedule may incorporate formal go/no-go assessments, during which the ARPA-E Program Director reviews the project in its entirety and determines whether to continue, suspend, or terminate the award.

If you have questions concerning Attachment 3, please contact the ARPA-E Program Director.

3.6 Attachment 4 (Reporting Checklist and Instructions)

ARPA-E has established a standard set of reporting requirements for all Prime Recipients and Subrecipients. Prime Recipients are required to provide ARPA-E with quarterly progress reports, quarterly financial reports, certain annual reports, and periodic reports and submissions. ARPA-E program staff will provide further details regarding these reports at a later time. In addition, Prime Recipients are required to complete certain reports upon the closeout or termination of the award. Reporting instructions are provided in Attachment 4.

If you have questions concerning Attachment 4, please contact the ARPA-E Legal Team. Contact information for the ARPA-E Legal Team is provided in Section 2.2.3 above.

3.7 Attachment 5 (Budget Information)

Applicants are required to submit a Budget Justification, SF-424, and SF-424A with their Full Applications. Upon selection, the Contracting Team will review your budget documents, and identify the information and documents that it needs to complete its analysis and approve the proposed budget. Any missing information and documents are requested through ARPA-E Budget Review Questionnaires. An excerpt of a sample ARPA-E Budget Review Questionnaire is attached at Appendix 2.

For additional guidance on drafting budget documents, you may wish to review the budget information available under "Pre-Award," "Award," and "Post-Award" at http://arpa-e.energy.gov/?q=arpa-e-site-page/sbir-sttr-guidance (SBIR/STTR awards).

If you have questions concerning Attachment 5, please contact the Contracting Team. Contact information for the Contracting Team is provided in Section 2.2.2 above.



3.8 Attachment 6 (National Policy Assurances)

All Prime Recipients and Subrecipients are required to comply with the nondiscrimination, environmental, and other requirements set forth in Attachment 6.

If you have questions concerning Attachment 6, please contact the ARPA-E Legal Team. Contact information for the ARPA-E Legal Team is provided in Section 2.2.3 above.

4 Additional Funding Instruments

4.1 Grants

In rare circumstances, ARPA-E may provide financial support to Prime Recipients through Grants. ARPA-E has established a Model Grant. Use of a standardized instrument expedites the award negotiation process and reduces the administrative burden associated with ARPA-E's active project management.

The Model Grant explains the Prime Recipient's duties and responsibilities concisely and in plain English, which facilitates their compliance with reporting and other obligations. The Model Grant is available on ARPA-E's website at http://arpa-e.energy.gov/arpa-e-site-page/award-guidance.

For questions about Attachment 1 and Attachment 2 of the Model Grant, please contact the appropriate legal counsel referenced above by the deadline specified in the award negotiations schedule applicable to your award. Attachments 4 or 6 may not be changed.

4.2 Funding Agreements with FFRDCs, GOGOs, and Similar Entities⁵

When a FFRDC is the *lead organization* for a Project Team, ARPA-E executes a funding agreement directly with the FFRDC and a single, separate Cooperative Agreement with the rest of the Project Team. Notwithstanding the use of multiple agreements, the FFRDC is the lead organization for the entire project, including all work performed by the FFRDC and the rest of the Project Team.

When a FFRDC is a *member* of a Project Team, ARPA-Egenerally executes a funding agreement directly with the FFRDC and a single, separate Cooperative Agreement with the rest of the Project Team. Notwithstanding the use of multiple agreements, the Prime Recipient under the Cooperative Agreement is the lead organization for the entire project, including all work performed by the FFRDC and the rest of the Project Team.

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⁵ This transactional arrangement may be used for non-SBIR/STTR awards only.



Funding agreements with DOE/NNSA FFRDCs take the form of Work Authorizations issued to DOE/NNSA FFRDCs through the DOE/NNSA Field Work Proposal system for work performed under Department of Energy Management & Operation Contracts. Funding agreements with non-DOE/NNSA FFRDCs, GOGOs, and Federal instrumentalities (e.g., Tennessee Valley Authority) generally take the form of Interagency Agreements. Any funding agreement with a FFRDC will have substantially similar terms and conditions as ARPA-E's Model Cooperative Agreement (http://arpa-e.energy.gov/arpa-e-site-page/award-guidance).

Non-DOE GOGOs and Federal agencies may be proposed as supporting project team members on an applicant's project. The Non-DOE GOGO/Agency support would be obtained via an Interagency Agreement between ARPA-E and the non-DOE GOGO/Agency, and provided as part of ARPA-E's standard substantial involvement in its funded projects.

4.3 Technology Investment Agreements

For non-SBIR/STTR awards, ARPA-E may use its "other transactions" authority under the America COMPETES Reauthorization Act of 2010 or DOE's "other transactions" authority under the Energy Policy Act of 2005 to enter into Technology Investment Agreements (TIAs) with Prime Recipients. ARPA-E may negotiate a TIA when it determines that the use of a standard cooperative agreement is not feasible or appropriate for a project.

In using a TIA, ARPA-E may modify standard terms and conditions contained in the ARPA-E model Cooperative Agreement

If Applicants are seeking to negotiate a TIA, they are required to explicitly request use of a TIA through the Business Assurances Form, available in ARPA-E eXCHANGE (https://arpa-e-foa.energy.gov/). Please refer to the Business Assurances Form for guidance on the content and form of the request. In addition, please refer to Section 1.1 of this Guide for deadlines on requesting negotiation of a TIA.

In general, TIAs require a cost share of 50%.

5 Required Forms

5.1 Budget Forms

Applicants are required to submit a Budget Justification, SF-424, and SF-424A Spreadsheet with their Full Applications. Upon selection, the Contracting Officer will review your budget documents for the information and documents that he needs to complete his analysis and approve the proposed budget. The Contracting Officer may



request additional information and documents through ARPA-E Budget Review Questionnaires. A sample ARPA-E Budget Review Questionnaire is attached as Appendix 2.

When you are sent the Budget Review Questionnaire, you will also be provided a new file containing a blank Budget Justification and SF-424A. This new file combines both documents and auto populates several fields to save the Selectee time. You are required to complete this document, taking into account any questions posed in a Budget Review Questionnaire. You may also be required to submit a revised SF-424. Please refer to the Budget Justification Guidance for detailed instructions on completing the budget forms, available at http://arpa-e.energy.gov/arpa-e-site-page/pre-award-guidance (non-SBIR/STTR awards) and http://arpa-e.energy.gov/?q=arpa-e-site-page/pre-award-guidance-sbir-sttr (SBIR/STTR awards).

You may also be required to submit an Indirect Rate Proposal to ARPA-E if you do not have a Federally approved indirect rate. A form for proposing an indirect rate is available at http://arpa-e.energy.gov/?q=arpa-e-site-page/pre-award-guidance (non-SBIR/STTR awards) and http://arpa-e.energy.gov/?q=arpa-e-site-page/pre-award-guidance-sbir-sttr (SBIR/STTR awards).

5.2 Environmental Impact Questionnaire

You are required to submit an Environmental Impact Questionnaire to ARPA-E program staff within a certain number of calendar days after the selection announcement. Please refer to Section 1.1 above for applicable submission deadlines.

Pursuant to the DOE's National Environmental Policy Act (NEPA) Implementing Procedures (10 C.F.R. Part 1021), ARPA-E is required to evaluate the potential environmental impact of any projects that it is considering for funding.

ARPA-E uses the Environmental Impact Questionnaire to obtain information regarding the potential environmental impact of particular projects and to determine the appropriate level of environmental review. Projects may qualify for a categorical exclusion under 10 C.F.R. § 1021.410 or may require further environmental review (e.g., environmental assessment or environmental impact statement).

You are required to answer the questionnaire for the entire project, including all work to be performed by other participants (Subrecipients, contractors, etc.). You may not limit your responses to work performed by the Prime Recipient.

In completing the Environmental Impact Questionnaire, Applicants must provide specific information regarding the nature of the Project Team's proposed action, including information on their size, operations, and the types and quantities of air emissions, wastewater discharges, solid wastes, land disturbances, etc. Applicants should identify



the location(s) of the proposed action and specifically describe the activities that would occur at each location.

Upon request, the Applicant or other participants are required to provide additional information to the ARPA-E NEPA Compliance Officer.

Additional information on NEPA compliance is available at http://nepa.energy.gov/. ARPA-E'S NEPA Categorical Exclusion Determinations are available at http://arpa-e.energy.gov/?q=nepa-compliance. If you have questions concerning NEPA compliance, please contact ARPA-E'S NEPA Compliance Officer.

NAME	TITLE	TELEPHONE	EMAIL
William Bierbower	ARPA-E NEPA Compliance Officer	202-287-6585	William.Bierbower@hq.doe.gov

6 Required Submissions

6.1 Technology-to-Market Plan

ARPA-E seeks to support high-risk energy technology RD&D projects for a finite period of time at a critical point in the technology development cycle. Beyond supporting technical progress, ARPA-E works to ensure that funded technologies are well positioned and prepared to take the necessary steps toward eventual market adoption. ARPA-E requires that at the start of each project the Prime Recipient prepare a Technology-to-Market Plan identifying the key steps for this advancement.

An initial Technology-to-Market Plan must be submitted and approved by the ARPA-E Program Director *before the award is executed*. Prime Recipients will thereafter be required to present to the ARPA-E Program Director updates on their progress against the plan per the Technology-to-Market milestones in Attachment 3 to the Award (usually every six months).

Instructions and a Technology-to-Market Plan template are available at http://arpa-e.energy.gov/?q=arpa-e-site-page/t2m-planning-template.

If you have questions concerning the Technology-to-Market Plan, please contact the assigned ARPA-E T2M Advisor. Contact information for the ARPA-E T2M Advisors is provided in Section 2.2.5 above.



6.2 Intellectual Property and Data Management Plan Requirements

ARPA-E requires every Project Team in which more than one team member will perform research and development work or share technical data, to negotiate and establish an Intellectual Property Management Plan for the management and disposition of intellectual property arising from the project. In addition, ARPA-E requires each Prime Recipient, regardless of whether there are other team members, to submit a Data Management Plan (DMP) that addresses how data generated in the course of the work performed under an ARPA-E award will be preserved and, as appropriate, shared publicly. A DMP should be submitted by the Prime Recipient as part of the Project Team's Intellectual Property Management Plan. DOE National Laboratories which already have a DOE-approved DMP in place may, but are not required to develop a new DMP to satisfy this requirement.

The Prime Recipient must submit a completed and signed Intellectual Property and/or a DMP to ARPA-E within six weeks of the effective date of the ARPA-E funding agreement. All Intellectual Property and DMPs are subject to the terms and conditions of the ARPA-E funding agreement and its intellectual property provisions, and applicable Federal laws, regulations, and policies, all of which take precedence over the terms of Intellectual Property and DMPs. DMPs will be reviewed by ARPA-E as part of the overall review process for Intellectual Property Management Plans in ARPA-E's ePIC System.

Note: For SBIR/STTR awards, ARPA-E requires each Project Team to negotiate and establish an Intellectual Property Management Plan which is the equivalent of an "Intellectual Property and Commercialization Rights Agreement" which is typically required by other DOE SBIR-STTR Programs.

a. Intellectual Property Management Plan

ARPA-E has developed a template Intellectual Property Management & Data Plan (http://arpa-e.energy.gov/?q=arpa-e-site-page/award-guidance) to facilitate and expedite negotiations between Project Team members. ARPA-E does not mandate the use of this template. ARPA-E and DOE do not make any warranty (express or implied) or assume any liability or responsibility for the accuracy, completeness, or usefulness of the template. ARPA-E strongly encourages Project Teams to consult their own legal counsel before using the template.

b. Data Management Plan

All ARPA-E Project Teams must select one of the two DMP options provided in this section. To promote rapid commercial application of the results of ARPA-E projects, it is anticipated that a majority of ARPA-E Project Teams will request that ARPA-E not



publicly disclose any data generated under the project and will assert that generated data is "Protected Data" or "SBIR-STTR Data" for their DMP under Option 1 below. Although university, nonprofit, and DOE National Laboratory that are Prime Recipients or project leads are not normally provided with the right to treat generated data as "Protected Data" they may request that such a right be provided in their DMP under Option 1. If such a right is provided to any awardee, ARPA-E/DOE will negotiate a mutually agreed upon list of data that cannot be treated as "Protected Data" or "SBIR-STTR Data".

The Prime Recipient is responsible for proposing an appropriate DMP and adhering to the final, agreed DMP as part of the overall research project to the best of their ability. If a DMP is not submitted by the Prime Recipient, Option 1 will be assumed by ARPA-E. Project Teams that intend to publicly disclose any data generated under the project must provide a DMP under Option 2.

i. DMP Options

Option 1: It is anticipated that all digital data generated will be protected as "Protected Data" and, therefore, will not be publicly shared during the applicable "Protected Data" five (5) year protection period [or "SBIR-STTR Data" four (4) year protection period]. Because any digital data will be at least five (5) [or four (4)] years old when it is no longer considered "Protected Data" or "SBIR-STTR Data", the effort to release such data will exceed any potential impact or value of the actual release. If any data generated under this award is published, an effort will be made to also release any related digital data that is not "Protected Data" or "SBIR-STTR Data" to the publicat the time of publication.

Option 2: The Project Team plans to publicly disclose technical data or data during the data protection period and/or expects that some data generated in the course of the project will not be asserted as "Protected Data" or "SBIR-STTR Data" by any Team Member. Project Teams that select this option must submit a DMP that meets the minimum requirements specified in Section 6.2(a)(ii) below.

ii. Minimum Requirements for Option 2 DMPs

Project Teams that choose to develop a DMP under Option 2 are encouraged to propose DMPs that reflect relevant community standards and best practices for data and metadata, and make use of community accepted repositories and publicly accessible databases whenever practicable. Project Teams should also consult the applicable FOA under which they were selected for award negotiations for any FOA-specific requirements that must be addressed in the DMP for the project.

Project Teams that select Option 2 must submit a DMP that includes the following:

1. A description of whether and how data generated in the course of the project - that is necessary to validate research findings or results - will be shared and



preserved. If such data will not be shared or preserved, the DMP should address the costs and benefits of not sharing or preserving data. At a minimum, the DMP must describe how any planned data sharing and preservation will enable validation of research findings or results, or how findings/results could be validated if data is not shared or preserved.

- 2. A plan for making all research data displayed in publications open, machine-readable, and digitally accessible to the public at the time of publication. This includes any underlying digital research data used to generate charts, figures, images, etc. in publications. The DMP must also address how the Project Team will ensure that publications include instructions on how data can be accessed.
- 3. An overview of the data management resources to be used in the course of the proposed research. DMPs that explicitly or implicitly commit to using data management resources at a facility that is conventionally only made available to approved users should include a written approval from the facility.
- 4. As appropriate and necessary, a plan to protect confidentiality, personal privacy, Personally Identifiable Information, and U.S. national, homeland, and economic security; recognize proprietary interests, business confidential information, and intellectual property rights; and avoid significant negative impact on innovation, and U.S. competitiveness; and be otherwise consistent with applicable laws, regulations, and DOE orders and policies.

6.3 Certification of Eligibility and Compliance (SBIR/STTR)

During award negotiations, ARPA-E will provide Prime Recipients under ARPA-E SBIR/STTR FOAs with a certification form that addresses compliance with Size Eligibility rules issued by the U.S. Small Business Administration (SBA) for the SBIR/STTR programs (see 13 C.F.R. §§ 121.101-121.108 and 121.701-121.705), as well as with SBIR/STTR program requirements contained in SBA's SBIR and STTR Policy Directives.

Prime Recipients are required to complete the certification form at the time of award execution and submit the signed form to ARPA-E with the signed award package. Failure to submit a signed certification form may result in delays in award execution or de-selection for award.

7 Required Registrations

7.1 FedConnect

Prime Recipients are required to acknowledge receipt of the award in FedConnect. If you are not already registered in FedConnect, please register immediately. To register in FedConnect, please refer to https://www.fedconnect.net/FedConnect/.



To learn how to use FedConnect, please refer to the FedConnect "Ready, Set, Go" User Guide at

https://www.fedconnect.net/FedConnect/PublicPages/FedConnect Ready Set Go.pdf. For technical assistance with FedConnect either e-mail support@fedconnect.net or call 1-800-899-6665.

Once the award has been signed by both parties, you will receive notification via FedConnect. At that point, you will need to login to FedConnect and acknowledge receipt of the award.

7.2 Dun and Bradstreet Data Universal Numbering System (DUNS) Number

Prime Recipients and Subrecipients are required to obtain a DUNS number. ARPA-E may not execute a funding agreement with a Prime Recipient until it has obtained a DUNS number. In addition, a Prime Recipient cannot execute a subaward with a Subrecipient until the Subrecipient obtains a DUNS number.

To obtain a DUNS number, please refer to http://fedgov.dnb.com/webform. It may take several weeks to obtain a DUNS number; therefore, Prime Recipients and Subrecipients should begin this process as soon as possible to avoid delays in the execution of a funding agreement.

The DUNS number for the award must comport with the DUNS number identified in the CCR Registry.

7.3 System for Award Management (formerly Central Contractor Registry)

Prime Recipients and Subrecipients are required to register with the System for Award Management (SAM). SAM was created to combine the capabilities of the Central Contractor Registry (CCR), the Federal Register, the Online Representations and Certifications Application (ORCA), the Extended Parties List System (EPLS) into one central database. Recipients will need to create a unique SAM username to gain access, but all records in CCR will already exist in SAM. Applicants who did not previously register in CCR must create a new SAM registration.

ARPA-E cannot execute a funding agreement with a Prime Recipient until it has completed its SAM registration. In addition, a Prime Recipient cannot execute a subaward with a Subrecipient until the Subrecipient completes its SAM registration.

To register with SAM, please refer to https://www.sam.gov. It may take several weeks to complete your registration with SAM; therefore, Prime Recipients and Subrecipients should begin this process as soon as possible to avoid delays in the execution of a funding agreement. Prime Recipients and Subrecipients who already previously



registered in CCR should create a SAM username and access their account as soon as possible, to ensure any incorrect information is corrected early in the process.

Please note that Prime Recipients and Subrecipients are required to maintain and update their information within SAM throughout the duration of the project.

7.4 Federal Funding Accountability and Transparency Act Subaward Reporting System (FSRS)

Prime Recipients are required to register with FSRS and complete required reporting in the FSRS database. ARPA-E may not execute a funding agreement with a Prime Recipient until it has completed its FSRS Registration. To register with FSRS and obtain guidance on reporting requirements, please refer to https://www.fsrs.gov/.

Please note that Prime Recipients are required to maintain and update their information within FSRS throughout the duration of the project.

8 Contracting Officer Determinations

The Contracting Officer is required to make certain determinations before executing the award, including assessing your financial management and project management capabilities, and reviewing the proposed cost share for the project. Contact information for the Contracting Officer is provided in Section 2.2.2 above.

8.1 Financial Management Assessment

The Contracting Officer is required to perform a financial management assessment to evaluate your ability to manage the financial aspects of an award and your plans to accomplish project activities with reasonable economy and efficiency. The standards for acceptable financial management systems are found at in the Code of Federal Regulations, 2 C.F.R. § 200.302.

8.2 Determination of Responsibility

The Contracting Officer is required to make an affirmative determination of responsibility. The responsibility determination includes the financial management assessment and business review, reviews of audits, and review of activities under previous awards, especially submission of reports. The responsibility determination considers if the contractor has the administrative and programmatic capabilities to perform.

The term "administrative capability" means the capability of a Prime Recipient or Subrecipient to develop and implement administrative systems, including systems



related to financial management, property management, procurement standards, financial reporting, record-keeping, and submission of administrative reports/certifications for award closeout.

The term "programmatic capability" means the technical capability of a Prime Recipient or Subrecipient to successfully carry out a project taking into account such factors as:

- The Prime Recipient's performance in successfully completing Federally and/or non-Federally funded projects similar in size, scope, and relevance to the proposed project;
- The Prime Recipient's history of meeting reporting requirements on prior or current assistance agreements with Federal and/or non-Federal organizations and submitting acceptable final technical reports;
- The Prime Recipient's organizational experience and plans for timely and successful achievement of the Technical Milestones and Deliverables in Attachment 3; and
- The Prime Recipient's staff expertise/qualifications and resources or ability to obtain them, to successfully achieve the goals of the project.

Consistent with ARPA-E's mandate to exercise good Federal stewardship, the Contracting Officer may request the insertion of one or more conditions into your award if he deems the project to be high risk. In such instances, the Contracting Officer will work with you to minimize the administrative burden while maximizing your prospects for success.

8.3 Cost Share Allowability

The Prime Recipient is required to provide cost share commitment letters from Subrecipients or third parties that are providing cost share, whether cash or in-kind. For SBIR/STTR awards, this requirement applies to Phase II and Phase IIS only.

Each Subrecipient or third party that is contributing cost share must provide a letter on appropriate letterhead that is signed by an authorized corporate representative. The letter must state, in unconditional and unequivocal terms, its commitment to provide cost share. The letter may not include any conditions for receipt of the cost share contributions. The letter must state the amount and form of cost share, the source and precise nature of the contribution, and the duration and timing of the commitment (e.g., two years beginning in July 2013).

The Contracting Officer will review this information and confirm that the cost share contributions are allowable under the applicable Federal cost principles, specified in the



project budget, verifiable from the Prime Recipient's records, and necessary and reasonable for proper and efficient accomplishment of the project. Every cost share contribution must be reviewed and approved in advance by the Contracting Officer and incorporated into the project budget before the expenditures are incurred. Please refer to the FOA for guidance on ARPA-E's cost share policy.

8.4 Pre-Award Costs

Upon selection for award negotiations, Applicants may incur pre-award costs at their own risk, consistent with the requirements in Attachment 1 to ARPA-E's Model Cooperative Agreement. ARPA-E will not reimburse pre-award costs incurred by Applicants before they are selected for award negotiations.

ARPA-E generally does not accept budgets as submitted with the Full Application. Budgets are typically reworked during award negotiations. ARPA-E is under no obligation to reimburse pre-award costs if, for any reason, the Applicant does not receive an award or the award is made for a lesser amount than the Applicant expected, or if the costs incurred are not allowable, allocable, or reasonable.

Given the uncertainty of award negotiations, it is strongly recommended that Prime Recipients and Subrecipients consult with the Contracting Officer (ARPA-E-CO@hq.doe.gov) before incurring any pre-award costs. However, Prime Recipients may submit reimbursement requests for insignificant costs (i.e., \$20,000 or less in total aggregate costs) incurred within the 90-day period immediately preceding the effective date of the funding agreement.

Prime Recipients are required to obtain written authorization from the Contracting Officer (ARPA-E-CO@hq.doe.gov) for (i) insignificant costs (i.e., \$20,000 or less in total aggregate costs) incurred outside of the 90-day period immediately preceding the effective date of the funding agreement, and (ii) significant costs (i.e., more than \$20,000 in total aggregate costs). In reviewing pre-award costs, the Contracting Officer will consider, among other factors, the time between selection and award, the time between receipt of application and award, the value of the pre-award costs to the overall success of the project, the severability of the funded project to the Prime Recipient's overall activities, the effect on the Total Project Cost, and any statutory authorizations and appropriations for the programmatic area.

9 ARPA-E Project Management

Prime Recipients and Subrecipients should provide sufficient resources in their proposed budgets to accommodate ARPA-E's active project management. ARPA-E has substantial involvement in the direction and redirection of projects from inception to completion.



- Prime Recipients must adhere to ARPA-E technical direction and comply with agency-specific and programmatic requirements.
- ARPA-E may intervene at any time in the conduct or performance of project activities.
- ARPA-E does not limit its involvement to the administrative requirements of the ARPA-E funding agreement. Instead, ARPA-E has substantial involvement in the direction and redirection of the technical aspects of the project as a whole.
- ARPA-E may modify or terminate projects that fail to achieve the negotiated Technical Milestones and Deliverables. Similarly, ARPA-E may continue, discontinue, or terminate projects that fail to achieve formal Go/No-Go decision points.

9.1 Invoice Review

To request reimbursement, Prime Recipients must submit: (1) an SF-270, available at http://www.whitehouse.gov/sites/default/files/omb/grants/sf270.pdf; (2) a reimbursement request form showing cumulative expenditures for the invoice period and cumulative expenditures to date (whether paid by ARPA-E or the Project Team) for the following SF-424A categories: Personnel (i.e., salaries and wages), Fringe Benefits, Travel, Equipment, Supplies, Contractual, Construction, Other, and Indirect Charges; and, (3) supporting documentation for the claimed expenditures, which may consist of summary information (e.g., printouts from internal financial systems) or detailed documentation (e.g., invoices on appropriate letterhead, equipment purchase acquisitions, and travel vouchers).

ARPA-E will not reimburse unallowable or unauthorized expenses.

For SBIR/STTR awards, this guidance applies to Phase II and Phase IIS only. During Phase I, Prime Recipients are paid on a fixed-obligation basis; ARPA-E will not perform invoice review during Phase I.

9.2 Cost Share Reporting

Written documentation showing that the Prime Recipient (or Project Team, as appropriate) paid at least the cost share percentage of total expenditures incurred during the relevant billing period must accompany all reimbursement requests. Prime Recipients may provide ARPA-E with (1) summary documentation that presents an overview of expenditures incurred during the relevant billing period (e.g., printouts from internal financial software) or (2) detailed documentation of expenditures incurred



during the relevant billing period, including but not limited to invoices on appropriate letterhead, equipment purchase requisitions, and travel vouchers.

If Prime Recipients anticipate difficulty providing the requisite cost share every billing period, they may request authorization from ARPA-E upon selection for award negotiations to (1) contribute the cost share percentage of total expenditures incurred every quarter (i.e., every three months), or (2) contribute the cost share percentage of total expenditures incurred every half-year (i.e., every six months). Such requests must be sent by email to the ARPA-E Budget Director during award negotiations and include the following information: (1) a detailed justification for the request; (2) a proposed schedule of payments, including amounts and dates; (3) a written commitment to meet that schedule; and (4) such evidence as necessary to demonstrate that the Prime Recipient has complied with its cost share obligations to date. The Contracting Officer must approve all such requests before they may go into effect. ARPA-E may revoke its authorization at any time for any reason.

If authorized by ARPA-E to provide the requisite cost share on a quarterly or biannual basis, Prime Recipients are required to submit the cost share report for the relevant quarter or half-year with the reimbursement request for that period. Such reports must be accompanied by written documentation, as described above, showing that the Prime Recipient (or Project Team, as appropriate) paid at least the cost share percentage of total expenditures incurred during the relevant quarter or half-year.

ARPA-E may deny reimbursement requests, in whole or in part, or modify or terminate funding agreements where Prime Recipients (or Project Teams) fails to comply with ARPA-E's cost share reporting requirements.

For SBIR/STTR awards, this guidance applies to Phase II and Phase IIS only.

9.3 Technology Transfer & Outreach Cost Reporting

ARPA-E is subject to a statutory requirement to contribute a percentage of its appropriated funds to Technology Transfer and Outreach (TT&O) activities. In order to meet this mandate, ARPA-E requires Project Teams under non-SBIR/STTR ARPA-E awards to spend at least 5% of the Federal funding provided by ARPA-E on TT&O activities to promote and further the development and deployment of ARPA-E funded technologies. Please refer to the FOA for information on allowable TT&O costs.

For each invoice submitted, the Prime Recipient will be required to provide a breakdown by budget category of all incurred TT&O costs and provide supporting documentation (e.g., trip reports). The invoice must show the TT&O budgeted costs and actual costs incurred for the relevant billing period and cumulative TT&O costs incurred to date. The budgeted and actual costs incurred must comport with the Prime Recipient's budget. Any variances must be explained in the invoice. The Prime



Recipient must explain how particular objectives in the Technical Milestones and Deliverables are advanced by the TT&O activities.

9.4 Other Reporting Requirements

ARPA-E requires Prime Recipients to submit detailed technical reports and other documents on a periodic basis. Please refer to Attachment 4 of ARPA-E's Model Cooperative Agreement for guidance on these reporting requirements, available at http://arpa-e.energy.gov/?q=arpa-e-site-page/award-guidance (non-SBIR/STTR awards) and http://arpa-e.energy.gov/?q=arpa-e-site-page/award-guidance-sbir-sttr (SBIR/STTR awards).

10 Internet Resources

You may wish to consult the following websites for additional information.

WEBSITE	HYPERLINK
Model Cooperative Agreement	Non-SBIR/STTR:
	http://arpa-e.energy.gov/arpa-e-site-page/award-guidance
	SBIR/STTR:
	http://arpa-e.energy.gov/?q=arpa-e-site-page/award-guidance-sbir-sttr
Model Grant	http://arpa-e.energy.gov/arpa-e-site-page/award-guidance
Required Forms	Non-SBIR/STTR:
	http://arpa-e.energy.gov/?q=arpa-e-site-page/pre-award-guidance
	SBIR/STTR:
	http://arpa-e.energy.gov/?q=arpa-e-site-page/pre-award-guidance-sbir-sttr
DOE Guide to Financial Assistance	http://energy.gov/management/downloads/guide-financial-assistance
DOE Financial Assistance Regulations (2 C.F.R. Part 200, as amended by 2 C.F.R. Part 910)	http://www.gpo.gov/fdsys/
NEPA Compliance	http://nepa.energy.gov
SF-425	http://www.whitehouse.gov/omb/grants_forms_
FedConnect	https://www.fedconnect.net/FedConnect/



FedConnect User Guide	https://www.fedconnect.net/FedConnect/PublicPages/FedConnect Ready Set Go.pdf
Dun and Bradstreet Universal Numbering System	http://fedgov.dnb.com/webform
System for Award Management	https://www.sam.gov
Federal Funding Accountability and Transparency Act Subaward Reporting System	https://www.fsrs.gov/

11 How to Expedite Your Award Negotiations

ARPA-E has compiled the following list of tips to help Prime Recipients and Subrecipients expedite the award negotiation process and meet award deadlines.

GENERAL:

- Identify the persons within your organization who will be participating in the award negotiations. Make sure they will have sufficient time and resources to participate in the award negotiation process during the next 60-90 days. (If any of the persons will be on vacation during this period, you should designate a backup person.)
- Participate in the ARPA-E webinar for Selectees (i.e., Applicants selected for award negotiations), which is usually held within 3 days of notification of selection for award negotiations and may also be posted to the website for reference at any time.
- Prime Recipients and Subrecipients should register immediately with the following organizations (see Section 7 above for registration information):
 - FedConnect,
 - Dun and Bradstreet Universal Numbering System (DUNS),
 - System for Award Management (SAM), and
 - Federal Funding Accountability and Transparency Act Subaward Reporting System (FSRS)

LEGAL:

Review ARPA-E's Model Cooperative Agreement at http://arpa-e-site-page/award-guidance (Non-SBIR/STTR awards) or http://arpa-e.energy.gov/?q=arpa-e-site-page/award-guidance-sbir-sttr (SBIR/STTR awards).

• INTELLECTUAL PROPERTY:

 Notify the DOE Assistant General Counsel for Intellectual Property and Technology Transfer immediately if you have any questions about



- Attachment 2 (Intellectual Property Provisions). See Section 2.2.4 above for contact information.
- Provide a final list of your Unlimited Data Rights to the DOE Assistant General Counsel for Intellectual Property and Technology Transfer. See Section 2.2.4 above for contact information.
- Research your intellectual property and how it was funded. If your intellectual property was developed with prior Government funding, that will affect your negotiations with the DOE Patent Counsel.

TECHNICAL:

- Work with the ARPA-E Program Director to quickly negotiate aggressive Technical Milestones and Deliverables.
- o Differentiate between tasks and milestones.
- o Milestones should be concrete, aggressive, and quantifiable.
- Include metrics so that milestones are measurable.

• TECHNOLOGY-TO-MARKET:

- Review the Technology-to-Market Plan template and requirements immediately.
- Ensure that your project budget allocates 5 percent of Federal funding for Technology Transfer and Outreach activities and that these funds are appropriately linked to specific activities outlined in the Technology -to-Market Plan.
- Designate a principal point of contact for Technology-to-Market activities.
- Work with the ARPA-E Program Director and Senior Commercialization Advisor to integrate Technology-to-Market Plan milestones into the Technical Milestones and Deliverables.

BUDGET:

- Submit supporting documentation for your proposed budget to the Contracting Team. Refer to the Budget Justification Guidance for detailed instructions on supporting documentation, available at http://arpa-e.energy.gov/?q=arpa-e-site-page/pre-award-guidance (non-SBIR/STTR awards) and http://arpa-e.energy.gov/?q=arpa-e-site-page/pre-award-guidance-sbir-sttr (SBIR/STTR awards).
- o Respond quickly (within 1-2 days) to Budget Review Questionnaires.
- o SF-424:
 - Modify your SF-424 to include a reasonable and realistic period of performance.
- Budget Justification Spreadsheet:
 - The Budget Justification Spreadsheet is linked to the SF-424A through Microsoft Excel, such that the SF-424A's fields autopopulate when the Budget Justification Spreadsheet is completed. Prior to submission, please review both the Budget Justification Spreadsheet and SF-424A to ensure that the information contained in both documents is accurate.



- For all budget categories, provide a rationale for reasonableness.
- Personnel Be sure to provide documentation that the proposed wage rates are actually being paid to the proposed employees (e.g., payroll records, pay stubs). For new hires, provide hire letters (or contingent hire letter) that state the wage rate or explain the basis of how the proposed rate was developed and provide supporting documentation.
- Travel Do not include additional travel that has not already been approved. Ensure that you have historical data justifying travel prior to negotiations.
- Cost share Be sure to provide signed cost share letters of commitment from any third party contributing cost share. Remember you may not use Federal funding, including contributions by Federally Funded Research and Development Centers (e.g., Argonne National Laboratory), to cover your cost share obligation. Any party providing cost share must confirm to ARPA-E that the proposed cost share is allowable. The letter may not include any contingent terms, conditions, or language.
- Subrecipients Be sure to provide a separate budget justification and SF-424A for any Subrecipients that are expected to perform 10% or more of the total project costs. For any Subrecipients that are expected to perform less than 10% of the total project costs, only a budget justification form is required.
- Vendors Be sure to provide support justifying vendor costs (including contracts and consultants).
- "Other" budget category Do not list other costs without supporting documentation and justification. Be sure to provide documentation regarding basis of cost and justification of need. For non-SBIR/STTR awards, include notation of any expenses in this category that are related to Technology Transfer and Outreach (TT&O).



APPENDIX 1

Notice to Prime Recipients and Subrecipients Regarding Confidential Information and Data and Protected Personally Identifiable Information



I. CONFIDENTIAL INFORMATION AND DATA

Recipients are required to mark confidential information and data in accordance with this guidance. Failure to properly mark confidential information and data may result in its public disclosure under the Freedom of Information Act (FOIA, 5 U.S.C. § 552) or otherwise. Note: Please be aware that documents related to your award – including the Cooperative Agreement or Grant – may be requested under the Freedom of Information Act (FOIA). However, ARPA-E notifies awardees of all FOIA requests for an awardee's commercial and proprietary information. Consistent with DOE regulation, ARPA-E provides awardees an opportunity to submit their views regarding the release of commercial and proprietary information contained in the requested documents. ARPA-E is diligent in protecting commercially sensitive information that is properly marked as described below.

A. Protected Data (Non-SBIR/STTR Awards)

Recipients must properly mark any documents containing Protected Data. "Protected Data" is defined as information and data produced under the award that, if developed at private expense, would qualify as trade secret, privileged, or confidential information or data. Protected Data is protected from public disclosure for five (5) years from the time it is first produced.

• The cover page must be marked with the following wording and identify the specific pages containing Protected Data:

PROTECTED RIGHTS NOTICE

Pages [__] of this document contain protected data that was produced under Agreement No. ____ with the U.S. Department of Energy. This data may not be published, disseminated, or disclosed to others outside the Government until 5 years after development of information under this Agreement, unless express written authorization is obtained from the recipient. Upon expiration of the period of protection set forth in this Notice, the Government shall have unlimited rights in this data.

- The header and footer of each page containing protected information must be marked with the following wording: "May contain protected information that is privileged or confidential and exempt from public disclosure."
- Ensure that all e-mails containing protected information are categorized as "confidential." (Learn how to mark a message confidential in Outlook: http://office.microsoft.com/en-us/outlook-help/mark-a-message-as-private-personal-or-confidential-HP005242880.aspx).



B. SBIR/STTR Data (SBIR/STTR Awards)

SBIR/STTR RIGHTS NOTICE

The cover page must be marked with the following wording and identify the specific pages containing SBIR/STTR Data:

These SBIR/STTR	data are furnishe	d with SBIR/STTR right.	s under	[Award
No	<u>or</u> a subaward ur	nder Award No	J.	For a
period of four (4)	years after accep	tance of all items to be	e deliver	ed undei
this [agreement <u>a</u>	o <u>r</u> subaward], the	Government agrees to	use the	se data
for Government p	ourposes only, and	d they shall not be disc	losed ou	tside the
Government (incl	uding disclosure f	or procurement purpo	ses) duri	ng such
period without pe	ermission of the P	rime Recipient/Subreci	pient, ex	kcept
that, subject to th	ne foregoing use d	nd disclosure prohibiti	ions, suc	h data
may be disclosed	for use by suppor	t contractors. After th	e afores	aid
four-year period,	the Government	nas a royalty-free licen	se to us	e, and to
authorize others t	to use on its beha	lf, these data for Gove	rnment	
purposes, but is re	elieved of all discl	osure prohibitions and	l assume	es no
liability for unaut	horized use of the	se data by third partie	s. This I	Votice

 The header and footer of each page containing protected information must be marked with the following wording: "May contain protected information that is privileged or confidential and exempt from public disclosure."

shall be affixed to any reproductions of these data in whole or in part.

 Ensure that all e-mails containing protected information are categorized as "confidential." (Learn how to mark a message confidential in Outlook: http://office.microsoft.com/en-us/outlook-help/mark-a-message-as-private-personal-or-confidential-HP005242880.aspx).

C. Other Confidential Information and Data

Recipients must properly mark any documents containing trade secrets or commercial/financial information that is privileged or confidential.

• The cover page must be marked with the following wording and identify the specific pages containing such information:

NOTICE OF RESTRICTION ON DISCLOSURE AND USE OF DATA

Pages [__] of this document may contain trade secrets or commercial or financial information that is privileged or confidential and exempt from public disclosure. Such information shall be used or disclosed only for



evaluation purposes or in accordance with a financial assistance or loan agreement between the submitter and the Government. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.

- The header and footer of each page containing such information must be marked with the following wording: "May contain trade secrets or commercial or financial information that is privileged or confidential and exempt from public disclosure."
- Each line and paragraph containing such information must be marked with double brackets or other clear identification, such as highlighting.
- Ensure that all e-mails containing protected information are categorized as "confidential." (Learn how to mark a message confidential in Outlook: http://office.microsoft.com/en-us/outlook-help/mark-a-message-as-private-personal-or-confidential-HP005242880.aspx).

II. PROTECTED PERSONALLY IDENTIFIABLE INFORMATION

Recipients should not include any Protected Personally Identifiable Information (Protected PII) in their submissions to ARPA-E. Protected PII is defined as any data that, if compromised, could cause harm to an individual such as identify theft. Protected PII includes:

- Social Security Numbers in any form;
- Place of Birth associated with an individual;
- Date of Birth associated with an individual;
- Mother's maiden name associated with an individual;
- Biometric record associated with an individual;
- Fingerprint;
- Iris Scan;
- DNA;
- Medical history information associated with an individual;
- Medical conditions, including history of disease;
- Metric information, e.g., weight, height, blood pressure;
- Criminal history associated with an individual;
- Ratings;
- Disciplinary actions;
- Financial information associated with an individual;
- Credit card numbers; and
- Security clearance history or related information (not including actual clearances held).



APPENDIX 2

Sample ARPA-E Budget Review Questionnaire



Company X

SF-424A Budget Category Questions

1. Personnel \$XXXXXX

Senior managements positions/qualifications have been identified however all other positions listed on your budget justification have not been identified. Please provide the following:

- Position title, job description, employee name, qualifications or resume
- Offer letters for future hires
- Payroll justification to include (snap shot of check stubs, offer letters, or certified payroll print out) for all employee supporting this program

2. Travel \$XXXXXX

• Please provide a print out of the company historical data used to justify each trip to total \$XXXXXX. Please provide specific trips that are planned by recipient staff for execution of this work. Please provide the work locations and tentative frequency of this travel, as well as the identity of proposed travelers. Please provide costing for airfare, hotel, car rental and other associated expenses of travel for each proposed trip. Currently, trips are described on a trip-by-trip basis, but these costs are not broken out by airfare, lodging, ground transportation, etc. More detail is necessary on a trip-by-trip basis.

3. Equipment \$XXXXXX

• Please provide copies of vendor quotes, catalog pricing or prior invoices etc. to justify each items cost. Please provide greater detail regarding the equipment purchases to be made. Figures are given for equipment in the proposal, but appear to be rough estimates without quotations from vendors. More information is needed on the equipment to be purchased and its use on this project. If there are additional pieces of equipment that will need to be purchased that were not originally envisioned in the proposal, please include them. Note that the total amount of the award may not increase.

4. Supplies \$XXXXXX

An estimated number was provided based on "Estimate/Historical" data. Please
provide copies of vendor quotes, catalog pricing or prior invoices etc. to justify
each items cost. Technical supplies are listed however no information is listed
for non-technical supplies, such as office supplies. If these supplies are not
covered by overhead costs, please clarify.



5. Contractual \$XXXXXX

- Vendor X Please provide support to justify vendor costs which may include written quotes made, or past invoices.
- Subrecipient 1 Please provide a copy of the latest rate agreement and identify the full calculations used to derive the total fringe and indirect costs.
- Subrecipient 2 Please include your negotiated indirect rate in the "Indirect (Subrecipient 2)" tab of your budget justification document to reflect the total amount.
- Subrecipient 3 Please provide travel detail including purpose of trip and the basis for the estimated costs. This may include items such as past trips, current quotations, Federal Travel Regulations, etc.
- Federally Funded Research and Development Center Z Please complete and submit a copy of the budget justification file.

6. Other \$XXXXXX

• Please provide documented proof of the \$190/sf cost for the Facility charge for Laboratory Space.

Additional Items:

- Please provide a revised SF-424 to reflect a suggested period of performance date of XX/XX/2013. Also please include a month, day, and year in both start and end of performance dates.
- Please provide a signed cost share letter from Company X confirming its cost share commitment.
- Please provide a signed cost share letter from Subrecipient 2 confirming its cost share commitment.